P6T6 WS Revolution

New Era Workstation Engine for Superior Graphic & Computing Choices On Demand

- Intel® Core™ i7 Processor Extreme Edition / Core™ i7 Processor / Xeon® 3500 Series Processor
- Intel® X58 / ICH10R
- Nvidia® nForce 200
- 6 PCI-E Gen2 x16 IO onboard
- True @16 3-Way SLI
- True 16+2 Power Phase Design
- ASUS EPU 6-Engine & TurboV
- ATI CrossFireX & NVIDIA SLI Support
- 2 onboard SAS ports
- G.P. Diagnosis Card Bundled
- ASUS Express Gate
- 100% High-quality Japan-made Conductive Polymer Capacitors!
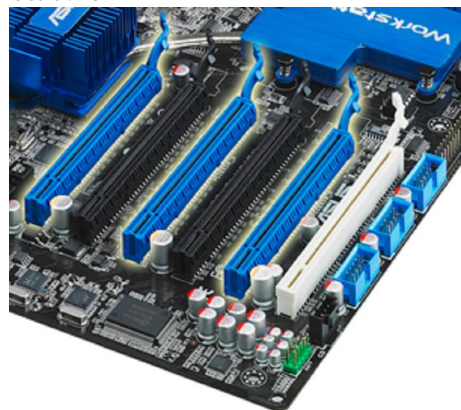 **VRM 5000hrs lifespan @105°C, 500,000hrs @65°C**

A Powerful Workstation Engine Essential in Your Professional Studio The ASUS Workstation Series is the ideal foundation for a powerful PC. It delivers awesome power, dependable performance and unparallel multiple I/O scalability for the most demanding tasks and future upgrades. Also, it provide extreme power saving experience with EUP 6 Engine function. The ASUS Workstation Series intelligently reduces operation noise and dissipates heat through advanced and environmentally friendly methods to accommodate user needs. Don't change yourself for a computer. Instead, let ASUS Workstation Series improves the quality of your work and life.

ASUS Workstation Exclusive Features

True @16 3-Way SLI

The Best Graphic Performance you EVER have
The True @16 PCI-E Gen2 3-Way SLI will present you the fastest and the most reliable graphic performance you ever have when you are engaged in Mechanical/Architecture/Interior /Aircraft/Audio/Video Design or when you are playing games in leisure time.
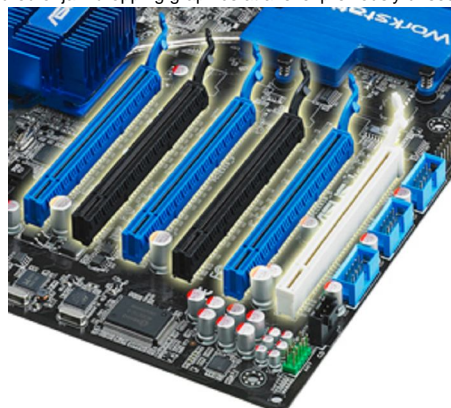
6 PCI-E Gen2 x16

No matter what your preference is, six PCI-E Gen2 x16 Slots gives you the sufficient I/O interfaces to fulfill your demand for graphic or computing solution. You'll be able to run both multi-GPU setups. The board features SLI/CrossFire on Demand technology, supporting up to three graphics cards in a 3-Way SLI or CrossFireX configuration. Whichever path you take, you can be assured of jaw-dropping graphics at a level previously unseen.

Diag. LED

Diag. LED checks key components (CPU, DRAM, VGA card, and HDD) in sequence during motherboard booting process. If an error is found, the LED next to the error device will continue lighting until the problem is solved. This usr-friendly design provides an intuitional way to locate the root problem within a second.

G.P. Diagnosis Card (bundled)

Bundled with the P6T6 WS Revolution motherboard, the G.P. Diagnosis card assists users in system checking by effortlessly and quickly providing precise system checks right after they
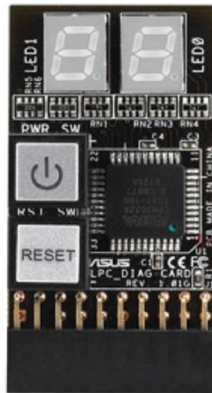
switch on their PCs.

ASUS Heartbeat

Brightly and vividly lighting LEDs shine around the ASUS brand name on the motherboard after successful booting process. With the breath-like deep blue lighting shining in regular tempo, ASUS Heartbeat makes the motherboard as vivid as life.

SAS Onboard

P6T6 WS Revolution provides users with onboard SAS ports to support for hard drive upgration flexibility. SAS hard drive has safer, faster and more reliability for data trasfer and storage.

ASUS SASsaby Card Support

This motherboard is fully compatible with ASUS SAS card (the SASsaby card series, optional). Faster, safer and more stable, SAS will provide users with a better choice for storage expansion and upgrade needs.

CPU, Chipset and Graphics features

LGA1366 Intel® Core™ i7 Processor Extreme Edition/Core™ i7 Processor

This motherboard supports the latest Intel® Core™7 processors in LGA1366 package with integrated memory controller to support 3-channel (6 DIMMs) DDR3 memory. Supports Intel® QickPath Interconnect (QPI) with a system bus of up to 6.4GT/s and a max bandwidth of up to 25.6GB/s. Intel® Core™7 processor is one of the most powerful and energy efficient CPUs in the world.

LGA1366 Intel® Xeon® processor

This motherboard supports the latest Intel® Xeon processors in LGA1366 package with integrated memory controller to support 3-channel (6 DIMMs) DDR3 memory. Supports Intel® QickPath Interconnect (QPI) with a system bus of up to 6.4GT/s and a max bandwidth of up to 25.6GB/s. It can support DDR3 ECC un-buffered memory.

SLI Technology

NVIDIA SLI™ (Scalable Link Interface) takes advantage of the increased bandwidth of the PCI Express bus architecture and features intelligent hardware and software that allows two GPUs to efficiently work together to deliver earth-shattering, scalable performance. For some applications nearly 2X performance! (From www.NVIDIA.com)

X58 Chipset

The IntelR X58 Express Chipset is the latest chipset designed to support latest IntelR Core?7 processors and Intel's next generation system interconnect interface, IntelR QuickPath Interconnect (QPI), providing improved performance by utilizing serial point-to-point links, allowing increased bandwidth and stability. It also supports to 36 PCI Express 2.0 lanes providing better graphic performance.

PCIe 2.0

This motherboard supports the latest PCIe 2.0 devices for double speed and bandwidth which enhances system performance.
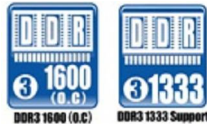
ATI CrossFireX Technology

ATI's CrossFireX boosts image quality along with rendering speed, eliminating the need to scale down screen resolutions to get the high image quality you want. CrossFire ignites with the higher antialiasing, anisotropic filtering, shading, and texture settings you desire. Adjust your display configurations, experiment with your advanced 3D settings, and check the effect with a real-time 3D-rendered preview within ATI's Catalyst? Control Center to rule your CrossFireX system.
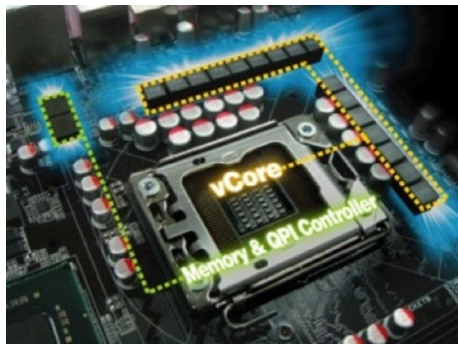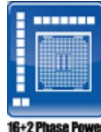
Triple-Channel DDR3 1600(O.C.)/1333/1066

The motherboard supports DDR3 memory that features data transfer rates of 1600(O.C.)/1333/1066 MHz to meet the higher bandwidth requirements of the latest operation system, 3D graphics, multimedia, and Internet applications. The triple-channel DDR3 architecture doubles the bandwidth of your system memory to boost system performance, eliminating bottlenecks with peak bandwidths of up to 25.6 GB/s. Furthermore, the supply voltage for the memory is reduced from 1.8 V for DDR2 to just 1.5 V for DDR3. This voltage reduction limits the power consumption and heat generation of DDR3 which makes it an ideal memory solution.

ASUS True 16+2 Phase Power Design

The breakthrough technology of 16+2 phase VRM design is bringing to the ASUS motherboards. 16+2 phase power design (16-phase to vCore; 2-phase to vDRAM/QPI controller inside CPU) can reach high power efficiency, dispel heat generated by VRM module effectively, and lower more temperature compared to other VRM solution. With the high quality power components such as low RDS (on) MOSFETs, Ferrite core chokes with lower hysteresis loss, and 100% Japan-made high quality conductive polymer capacitors, ASUS 16+2 phase VRM design also ensure longer component life, minimum power loss, and help to reach the superior overclocking score ever than before.

ASUS EPU-6 Engine

This motherboard supports the latest Intel® Core™2 processors in LGA775 package. It also can support Intel® 45nm Multi-Core CPU. With new Intel® Core™ microarchitecture technology and 1600/1333/1066/800MHz FSB, Intel® Core™2 processor is one of the most powerful and energy efficient CPU in the world.

Best Quality Power Components

100% High-quality Japan-made Conductive Polymer Capacitors!(5000 hrs VRM)
Low RDS (on) MOSFETs with min. switching loss & lower temperature, Ferrite Core chokes with lower hysteresis loss, and 100% Japan-made high quality, long life conductive polymer capacitors.

ASUS Quiet Thermal Solution

Up to 20°C(36°F) Cooler - Stack Cool 2

ASUS Power Saving Solution

AI Nap

Minimize noise and power consumption when temporarily away!
With AI Nap, users can instantly snooze your PC without terminating the tasks. System will continue operating at minimum power and noise when user is temporarily away. It keeps downloading files or running applications in quietest state while you´re sleeping. Simply click keyboard or mouse, you can swiftly wake up the system in few seconds.

ASUS Quiet Thermal Solution

ASUS TurboV

System Level Energy Saving
Feel the adrenaline rush of real-time OC - now a reality with the ASUS TurboV. This extreme OC tool lets you set new ambitions on the OC stage with an advanced and easy-to-use interface - allowing you to overclock without exiting or rebooting the OS. With micro adjustments of the CPU PLL, NB, NB-PCIe, and DRAM voltages in 0.02v intervals, there are no limits - only extreme results to break new OC records!

ASUS Express Gate

5 Secs Bootup to online
Taking only 5 seconds to go online from bootup, Express Gate is the one-stop gateway to instant fun! It´s a unique motherboard built-in OS. You can utilize the most popular Instant Messengers (IM) like MSN, Skype, Google talk, QQ, and Yahoo! Messenger to keep in touch with friends, or quickly check on the weather and e-mails just before leaving your house. What´s more, the user-friendly picture manager lets you view your pictures without entering Windows at anytime!

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Aesthetic Heat-pipe

Effective Fanless Heat Dissipation at 0dB

Stack Cool 2 is a fanless cooling solution offered exclusively by ASUS. It effectively and noiselessly transfers heat generated by the critical components to the other side of the specially designed PCB (printed circuit board) for effective heat dissipation - making temperatures cooler by up to 20°C.

Active Quiet & Cool

ASUS Fan Xpert intelligently allows users to adjust both the CPU and chassis fan speed according to different ambient temperature , which is caused by different climate conditions in different geographic regions and system loading.Built-in variety of useful profiles offer flexible controls of fan speed to achieve a quiet and cool environment.

ASUS EZ DIY

Q- Shield

Easy and Comfortable Installations

The specially designed ASUS Q-Shield does without the usual "fingers" - making it convenient and easy to install. With better electric conductivity, it ideally protects your motherboard against static electricity and shields it against Electronic Magnetic Interference (EMI).

CrashFree BIOS 3

Simply restore corrupted BIOS data from USB flash disk

The ASUS CrashFree BIOS 3 allows users to restore corrupted BIOS data from a USB flash disk containing the BIOS file. This utility saves users the cost and hassle of buying a replacement BIOS chip.

O.C. Profile

Conveniently store or load multiple BIOS settings
Freely share and distribute favorite overclocking settings
The motherboard features the ASUS O.C. Profile that allows users to conveniently store or load multiple BIOS settings. The BIOS settings can be stored in the CMOS or a separate file, giving users freedom to share and distribute their favorite overclocking settings.

Industry Standard

SATA on the Go

The motherboard supports the next-generation hard drives based on the Serial ATA (SATA) 3Gb/s storage specification, delivering enhanced scalability and doubling the bus bandwidth for high-speed data retrieval and saves. The external SATA port located at the back I/O provides smart setup and hot-plug functions. Easily backup photos, videos and other entertainment contents on external devices.

Dual Gigabit LAN

The integrated dual Gigabit LAN design allows a PC to serve as a network gateway for managing traffic between two separate networks. This capability ensures rapid transfer of data from

Lowers Temperatures by up to 10°C

The aesthetic heat-pipe design effectively directs the heat generated by the chipsets to the heatsink near the back I/O ports - where it can be carried away by existing airflows from the CPU or a bundled optional fan. This innovative and groundbreaking fanless heat pipe design effectively lowers temperatures by up to 10°C without having lifetime problems that a normal chipset fan has. Furthermore, it provides options for users to install side-flow fans or a passive cooler. This Heat Pipe design is the most reliable fanless thermal solution to date.

ASUS Crystal Sound

Noise Filtering

Eliminate background noise while recording

This feature detects repetitive and stationary noises like computer fans, air conditioners, and other background noises then eliminates it in the incoming audio stream while recording.

Q-Connector

Make connection quick and accurate!

The ASUS Q-Connector allows you to connect or disconnect chassis front panel cables in one easy step with one complete module. This unique adapter eliminates the trouble of plugging in one cable at a time, making connection quick and accurate.

EZ-Flash 2

Simply update BIOS from a USB flash disk before entering the OS

EZ Flash 2 is a user-friendly BIOS update utility. Simply launch this tool and update BIOS from a USB flash disk before entering the OS. You can update your BIOS only in a few clicks without preparing an additional floppy diskette or using an OS-based flash utility.

TPM

Trusted Platform Module (TPM) system, which can securely store keys(for encryption/ decryption), digital certificates, passwords, and data. A TPM system also helps enhance network security, protects digital identities, and ensures platform integrity.

*The TPM module is purchased separately

Dual RAID

The Intel ICH10R chipsets incorporate Six Serial ATA connectors with high performance RAID functions in RAID 0, 1, 10 and 5. The JMicron controller provides another two Serial ATA connectors for RAID 0, 1, and JBOD functions. This motherboard is the ideal solution to enhance hard disk performance and data back up protection without the cost of add-on cards.

High Definition Audio

Enjoy high-end sound system on your PC!

The onboard 8-channel HD audio (High Definition Audio, previously codenamed Azalia) CODEC enables high-quality

WAN to LAN without any added arbitration or latency.

192KHz/24-bit audio output, jack-sensing feature, retasking functions and multi-streaming technology that simultaneously sends different audio streams to different destinations. You can now talk to your partners on the headphone while playing a multi-channel network games. All of these are done on one computer.

S/PDIF-out on Back I/O Port

This motherboard provides convenient connectivity to external home theater audio systems via coaxial and optical S/PDIF-out (SONY-PHILIPS Digital Interface) jacks. It allows to transfer digital audio without converting to analog format and keeps the best signal quality.

RoHS

GreenASUS

The motherboard and its packaging comply with the European Union's Restriction on the use of Hazardous Substances (RoHS). This is in line with the ASUS vision of creating environment-friendly and recyclable products and packaging to safeguard consumers' health while minimizing the impact on the environment.

Back Panel I/O Ports

Specifications

CPU	Intel® Socket 1366 Core™ i7 Processor Extreme Edition/Core™ i7 Processor/ LGA1366 socket for Intel® Xeon® processor 3500 Series LGA1366 socket for Intel® Xeon® processor E5502/E5504/E5506 Supports Intel® Dynamic Speed Technology *Refer to www.asus.com for Intel CPU support list
Chipset	Intel® X58 + ICH10R Nvidia® nForce200
System Bus	Up to 6400 MT/s ; Intel® QuickPath Interconnect
Memory	6 x DIMM, Max. 24 GB, DDR3 2000(O.C.)*/1866(O.C.)*/1800(O.C.)*/1600(O.C.)/1333/1066 ECC,Non-ECC,Un-buffered Memory Triple channel memory architecture Support Intel Extreme Memory Profile (XMP) *Hyper DIMM (DDR3 1800MHz or above) support is subject to the physical characteristics of individual CPUs. **Refer to www.asus.com. Or user manual for the Memory QVL (Qualified Vendor Lists.) *** ECC memory support requires Intel® Nehalem-WS 1S W3500 series or Nehalem-EP E5502/E5504/E5506 processors
Expansion Slots	2 x PCIe 2.0 x16 slots (at x16 or x8 mode) 1 x PCIe 2.0 x16 slots (at x16 mode) 2 x PCIe 2.0 x16 slots (at x8 mode) 1 x PCIe 2.0 x16 slot (at x4 mode) * True @ x16 3-Way SLI™ in slots 1, 3 and 5 when slots 2 and 4 are not occupied
Multi-GPU Support	Supports NVIDIA 3-Way Geforce SLI™ techonology Supports ATI CrossFireX™ technology, up to Quad CrossFireX™
Storage	**Intel ICH10R controller** 6 xSATA 3 Gb/s ports Intel® Matrix Storage supporting SATA RAID 0, 1, 10, and 5 **Marvell 88SE6320 SAS controller** 2 x SAS ports supporting SAS RAID 0, 1 **Marvell 88SE6121 SATA controller** 2 xExternal SATA 150/300 (SATA On-the-G0), supporting SATA RAID 0, 1
LAN	2 x Realtek 8111C Dual Gb LAN Support Teaming Technology
Audio	ADI 2000B, 8 -Channel High Definition Audio CODEC Multi-Streaming Jack-Sensing Front Panel Jack-Retasking Coaxial / Optical S/PDIF out ports at back I/O ASUS Noise-Filer

USB	12 USB 2.0 ports
ASUS Workstation Special Features	6 PCIe Gen2.0 x 16 slots G.P. Dignosis Card bunddle ASUS SASsaby Cards support ASUS WS Diag. LED ASUS WS Heartbeat SAS Onboard
Special Features	EPU - 6 Engine True 16+2 Phase Power Design Turbo V Fan Xpert Express Gate AI Nap Q-Shield Q-Connector Fanless Design: Heat-pipe solution Fanless Design: Stack Cool 2 My Logo 2 CrashFree BIOS 3 EZ Flash 2 C.P.R.(CPU Parameter Recall) SFS (Stepless Frequency Selection) O.C. Profile
Back Panel I/O Ports	1 x PS/2 Keyboard 1 x PS/2 Mouse 2 x External SATA 1 x S/PDIF Out (Coaxial + Optical) 2 x LAN(RJ45) port 6 x USB 2.0/1.1 8 -Channel Audio I/O
Internal I/O Connectors	24-pin EATX Power connector 8-pin ATX +12V Power connector Chassis intrusion CPU fan with PWM control Chassis fan1 with Q-fan control Chassis fan2 with Q-fan control Chassis fan3 with Q-fan control PWR fan CD audio in 3 x USB connectors support additional 6 USB ports 20-pin Panel connector TPM header Front panel connector S/PDIF Out header
BIOS	16 Mb Flash ROM AMI BIOS, Green, PnP, DMI v2.0, Wfm2.0, ACPI v2.0a, SMBIOS v 2.4
Manageability	WOL/WOR by PME,WOR by Ring,Chasis Intrusion,AI NET2
Accessories	BIOS flash utility under DOS AI Suite ASUS Update ASUS PC Probe II Anti-Virus Software (OEM version) Adobe Acrobat Reader ver 8.0 Microsoft DirectX ver 9.0C Image-Editing Suite
Form Factor	ATX Form Factor 12 inch x 9.6 inch (30.5 cm x 24.5 cm)